

## **ABSTRACT OF THE DISCLOSURE**

This invention relates to a cooled deformable-mirror and its mount. A deformable mirror is provided comprising a reflective element provided on a substrate that is secured to a deformable element, wherein the substrate comprises at least one channel having a pair of ports both located around the peripheral edge of the substrate. In addition, a deformable-mirror mount and the deformable mirror described above are provided, wherein the mount has a body with a central aperture defined by a supporting surface sized and shaped to support the mirror when installed, and wherein the mount is provided with at least a pair of channels that terminate to face the ports in the mirror when the mirror is installed, the channels of the mirror and the mount being connected via flexible seals.